Work Order ID 99919 *99919*

Memo

April-16-13 9:30:24 AM

Quality Control

Item ID: 647.4611 Accept *N900040100* Setup Start **Revision 1D:** Item Name: Deflector **Start Date:** 4/16/13 Start Qty: 5.00 **Cust Item ID:** Required Date: 4/30/13 Req'd Qty: 5.00 **Customer:** Reference: Start Run MLJ Approvals: **Process Plan:** Date: 13-04-16 Tooling: Date: Stop QC: SPC (Y/N): Date: Date: Sequence ID/ Operation Set Up/ Tool ID Tool# Reject Plan Accept Reject Insp. Work Center ID Description **Run Hours** Qty Code Qty Number Stamp **Draw Nbr** Revision Nbr 647.4600 N/C 110 0.00 HAAS CNC VERTICAL MACHINING #1 *4.10* HAAS I Memo HAAS CNC vertical machine #1 1-Machine per folio FB174 DWG REV. MC FOLIO REV: AA 2- deburr and break all sharp edges 120 QC2- Inspect parts off machine FAI/FAIB *120*

0.00

NCR:	Yes	1	No
INCh.	162	•	INU

NCR: Ye	CR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE											
										QA Closed:	Date	e:
Vork Order	•				DISPOSITION			. <u>-</u> .	AGAINST [DEPARTMENT	PROCESS	;
	-				Rework	7		Skid-tube	Crosstube		Water Jet	Engineering
Part No	o. Scrap							Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is	7	Thern	noforming	Finishing	Rec/Sto	e/Packaging	Other
NCR No)				Work Order Update		ļ	Large Fab	Composite		Supplier	
Root				Desc	ription of work order update		Initial	Act	ion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Cł	nief Eng	Descr	iption	Date	Verification	QC Inspector
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napproved			<u> </u>						<u> </u>			
					·	FAUI	LT CATE	GORY				
Landing	Gear			_	General		1		_		_	_
	Bending				Bend	\perp	Grain	r	_	Ovalized	L	Pressure/Forced
	Centre N	ot Conce	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under		Temperature/Cure
. L	Cracks			L	Broken/Damaged		Inspecti	on Incomplete		Part Incorred	it L	Weld
	Crushed/	'Crimped			Burrs	L	Instruct	ions Incomplete/L	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled
1	Cuffs			L	Contamination	L	Mainte	nance		Part Moved		
	Heat Trea	at			Countersink		Mislabe	led	L	Positioned V	/rong _	_
	Inspectio	n Strip in	Tube		Cut Too Short		Misread	t		Power Loss/	Surge	Other
	Ripples in	n Bend			Drill Holes		Offset		_			
	Torque V	Vaves in E	Extrusio	n [Drawing		Out of 0	Calibration				
Γ	Turning S	Sequence	!		Finish		Out of 9	Sequence				
	ー Wave/Tw	vist in Tul	be		Folio		Outside	Dimensions				

DQA:

Date:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 99919

April-16-13 9:30:24 AM

99919

Item 1D: 647.4611 Accept *N900040100* Setup Start **Revision ID:** Item Name: Deflector **Start Date:** Start Oty: 5.00 4/16/13 Cust Item 1D: Required Date: 4/30/13 Req'd Qty: 5.00 **Customer:** Reference: Run **Process Plan: Approvals:** Date: **Tooling:** Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ **Operation** Set Up/ Tool ID Tool# Plan Accept Reject Reject Insp. Work Center ID Description **Run Hours** Qty Qty Code Number Stamp 130 QC8- Inspect parts - second check 0.00 DAS *130* 0.00 Memo **Quality Control** 131 0.00 5 \$ DE B.5-31. *131* HandFinish 0.00 Memo Hand Finishing CLEAN AND REMOVE ALL PART MARKING 140 Outsource process-Anodize per OSI017 4.1.10.1 0.00

0.00

CZ 13/06/03 (5)

140

Outsource4

Outsource process - Anodize

Memo

Black Anodize as per Dwg 647.4611

Issue P/O:

NCD.	Voc	1	No
NCR:	Yes	/	No

DQA: Date:

NCK: Y	es 	/ No				WORK ORDER NON-	COr	VFOR	VIAINCE / UP	DAIE	QA Closed:	Dat	te:	
Work Orde	r:					DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS		
Part N	_					Rework Scrap		ı	Skid-tube Machining	Crosstube Small Fab	ı	Water Jet d. Eng. Coor.		Engineering Quality
NCR N	o					Use-as-is Work Order Update	_	Thermoforming Finishing Large Fab Composite			Rec/Stol	re/Packaging Supplier	ᆸ	Other
Root					Descr	ription of work order update	T	nitial	Ac	tion	Sign &			
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	n	QC Inspector
oc/Data													1	
quip/Tooling														
perator	_													
Material														
etup	_							į					•	
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upplier	_											ē		
raining	_		İ											
inapproved													\Box	
							FAUL	T CATE	GORY					
Landin	_				r-	General	_	1			1	r		
	$\overline{}$	Bending			_	Bend		Grain			Ovalized		\vdash	Pressure/Forced
		Centre No	t Concer	itric to (o/s _	BOM/Route		Hardwa			Over/Under		-	Temperature/Cure
	≀	Cracks			<u> </u>	Broken/Damaged			on Incomplete	<u> </u>	Part Incorred		$\boldsymbol{\vdash}$	Weld
Ļ	_	Crushed/0	Crimped			Burrs			ions Incomplete/	Unclear	Part Lost/Mi	ssing [لـــا	Wrong Stock Pulled
<u> </u>		Cuffs				Contamination		Mainte			Part Moved			
1	_	Heat Trea	t			Countersink		Mislabe			Positioned V	~ r		
		Inspection		Tube		Cut Too Short		Misread	I		Power Loss/	Surge	\sqcup	Other
1	_	Ripples in				Drill Holes		Offset						
Ĺ	_	Torque W		xtrusio	n L	Drawing	<u> </u>	l .	Calibration					
		Turning Se				Finish		\$	equence					
		Wave/Tw	ist in Tub	e		Folio		Outside	Dimensions					

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

99919

Page 3

April-16-13 9:30:24 AM

Required Date: 4/30/13

Item ID:

647.4611

Accept

N900040100

Setup Start

Revision ID: Item Name: **Start Date:**

Deflector

4/16/13

Start Qty: 5.00 Req'd Qty: 5.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ **Work Center ID**

Operation **Description**

Receive & Inspect for Damage & Mat'l Certs

Set Up/ Run Hours 0.00

Tool ID

Tool # Plan Code

Reject Accept Qty Qty

Reject Insp.

Number Stamp

150

Packaging

150 Packaging

Memo

0.00

155

155 QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

160

Spray Painting per QSI005 4.2

0.00

160

SprayPaint

Memo

0.00

Spray Painting

PRIME AS PER DWG, SEE NOTE #2

PRIMER BATCH: 125452

CL 13/06/03(8)

											DQA:	Dat	te:	
NCR:	Yes	/ No				WORK ORDER NON-O	COI	NFOR	MANCE / UPDATE		QA Closed:	Dat	te:	
Work Orde	o é ·					DISPOSITION			AGAINST	DE	PARTMENT	PROCESS		
Part No					Rework Scrap Use-as-is Work Order Update	Scrap Machining Small Fab Use-as-is Thermoforming Finishing			-1	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier		Engineering Quality Other		
Root					Descri	ption of work order update		Initial	Action		Sign &			
Cause		Date	Step	Qty		or Non-conformance	Cł	nief Eng	Description		Date	Verification	n	QC Inspector
Doc/Data														
Equip/Tooling														
Operator														
Material		1												
Setup														
Other		İ		ļ										
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Supplier														-
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					, ,	F.	AUI	LT CATE	GORY					
Landi	ng (Gear				General		_	_		_			ī
		Bending				Bend		Grain			Ovalized			Pressure/Forced
		Centre No	ot Concei	ntric to	o/s	BOM/Route		Hardwa	re	_	Over/Under	tolerance		Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorred	t [Weld
		Crushed/	Crimped			Burrs		instruct	ions Incomplete/Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
	_	Cuffs				Contamination		Mainte	enance		Part Moved	•		-
		Heat Trea	ət			Countersink	Г	Mislabe	eled		Positioned W	/rong		

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Other

Power Loss/Surge

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short Drill Holes

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 99919

April-16-13 9:30:24 AM

Required Date: 4/30/13

99919

Item ID:

647.4611

Accept

N900040100

Setup Start

Revision ID: Item Name:

Start Date:

Deflector

4/16/13

Start Qty: 5.00 Req'd Qty: 5.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

OC:

Date:

SPC (Y/N):

Date:

Sequence ID/ **Work Center ID**

170

Operation

Description

Q214- Inspect Spray Paint

Set Up/ **Run Hours** Tool ID

Tool # Plan

Code Qty

Reject Accept Qty

Reject

Insp. Number Stamp

170

Quality Control

Memo

180

120

Packaging

Memo

0.00

0.00

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

5x M.W. 13-07-03

190

QC21- Final Inspection - Work Order Release

Identify as per dwg & Stock Location: 57543

0.00

190

QC

Memo

0.00

Quality Control

منتزا

NCR: Ye	R: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE QA Closed: Date:											
Work Ordei	r:				DISPOSITION			AGAINST DE	PARTMENT,	_		
Part No					Rework Scrap Use-as-is Work Order Update	Scrap Machining Small Fab Prod. Eng. Coor. Qu Use-as-is Thermoforming Finishing Rec/Store/Packaging O						
THEIR THE	J		· · · · ·									
Root	Date	Step	Qty		ption of work order update or Non-conformance	Initial Chief E	L.	Action scription	Sign & Date	Verification	QC Inspector	
Cause loc/Data quip/Tooling location laterial etup other rocess upplier raining	Date	Зсер	Qty					хприон	Dute	Vermedian	QC IIISPECTOI	
						AULT CA	TEGORY					
Landin	Bending Centre Cracks Crushed Cuffs Heat Tr Inspect Ripples Torque	Not Conce	Tube		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish	Inspections of the control of the co	ware ection Incomplete uctions Incomplete ntenance abeled ead	e/Unclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct sissing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other	

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Folio

Picklist Print

April-16-13 9:30:27 AM

Work Order ID: 99919

99919

Parent Item:

647.4611

647 4611

Parent Item Name: Deflector

Start Date: 4/16/13

Required Date: 4/30/13

Start Qty: 5.00

Required Qty: 5.00

Comments:

IPP REV: A NEW ISSUE 13/04/01 JFS VERIFY BY: JLM

Component Item ID/ Item Name

Replacement Mfg/ Item ID

Purch

Bin Primary Item Location Last Location

Route Seq ID Unit of Qty on Measure Hand

Qty per Kit Total

Qty

Qty Issued

Date Status Issued

M7075T6B1.250X07.00

Purchased

No

f

83.3333

20.835

M7075T6R1 250X07 000

7075-T6 BAR 1.25" X 7.000"

**

Location Loc Qty Loc Code MAT 83.3333 **124831** 83.3333

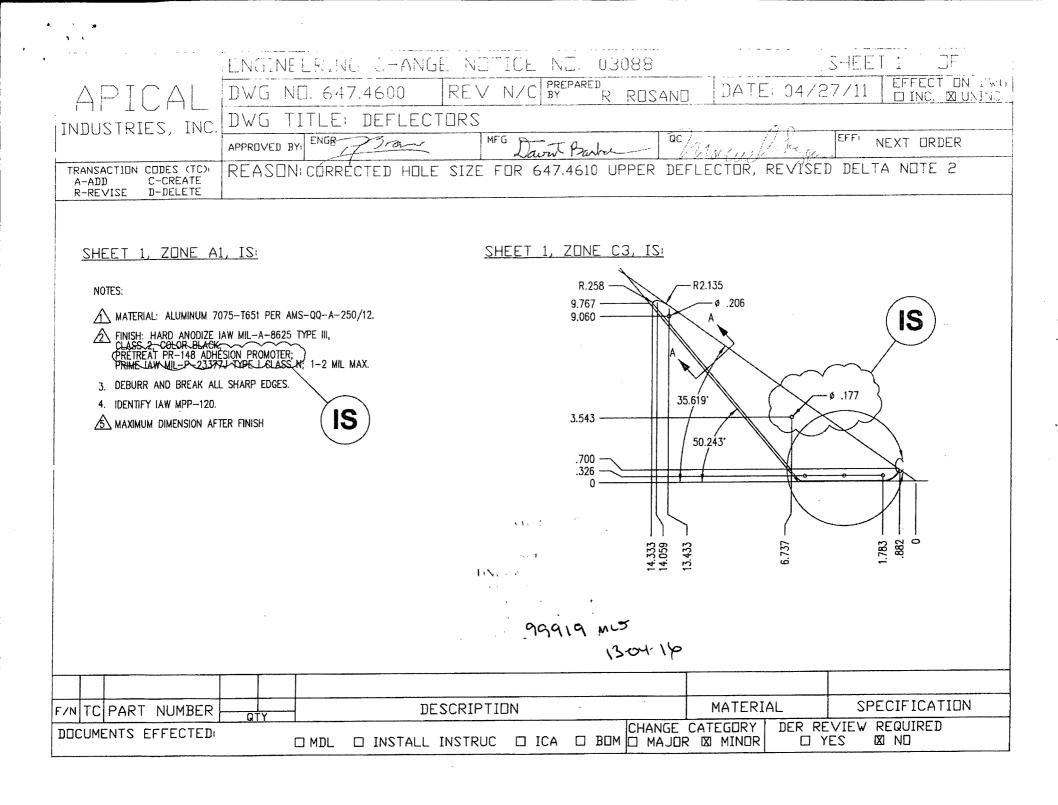
Page 1

											DQA:	Date:	3
NCR:	/	/ No				WORK ORDER NON-	COF	MEO DA	MANCE / LIDE	NATE	DQA.	Date.	<u>·</u>
NCK.	res	/ No				AAOUL OUDER 14014-1		aron:	VIAIGE / OF		QA Closed:	Date:	
Work Ord	or.					DISPOSITION				AGAINST D	EPARTMENT,	/PROCESS	
WOIR OIG	-••					Rework	7		Skid-tube	Crosstube	7	Water Jet	Engineering
Part I	lo.					Scrap]	1	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is]		noforming	Finishing	Rec/Stor	re/Packaging	Other
NCR I	10.					Work Order Update]		Large Fab	Composite	_	Supplier	
Root			<u></u>		Descri	 ption of work order update		nitial	Act	ion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	1	ief Eng	Descr	iption	Date	Verification	QC Inspector
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		Bending			<u> </u>	Bend	\perp	Grain		_	Ovalized		Pressure/Forced
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		Cracks			ļ	Broken/Damaged		1	on Incomplete		Part Incorred		Weld
		Crushed/	Crimped			Burrs	\perp	ł	ions Incomplete/U	Inclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	<u> </u>	Cuffs				Contamination	<u>_</u>	Mainte		<u> </u>	Part Moved		
		Heat Trea			<u> </u>	Countersink		Mislabe			Positioned V	_	,
	L	Inspection		Tube		Cut Too Short	\perp	Misread	d .	L_	Power Loss/	Surge	Other
	L	Ripples in				Drill Holes	L	Offset					
	_	Torque W	/aves in E	xtrusio	n L	Drawing	L	4	Calibration				
	ŀ	Turning S	equence		1	Finish		Out of 9	Sequence				Į.

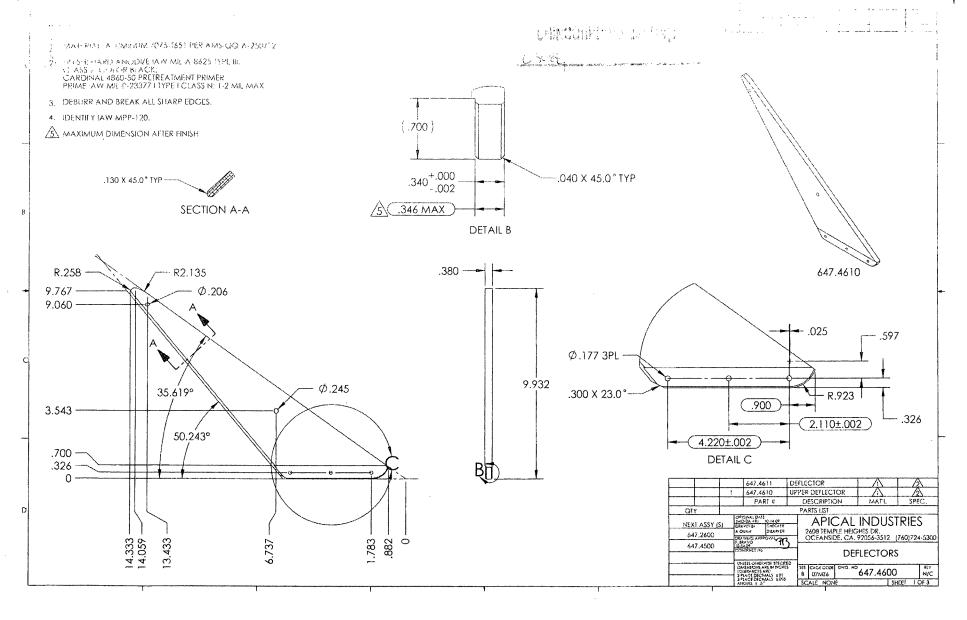
Outside Dimensions

Wave/Twist in Tube

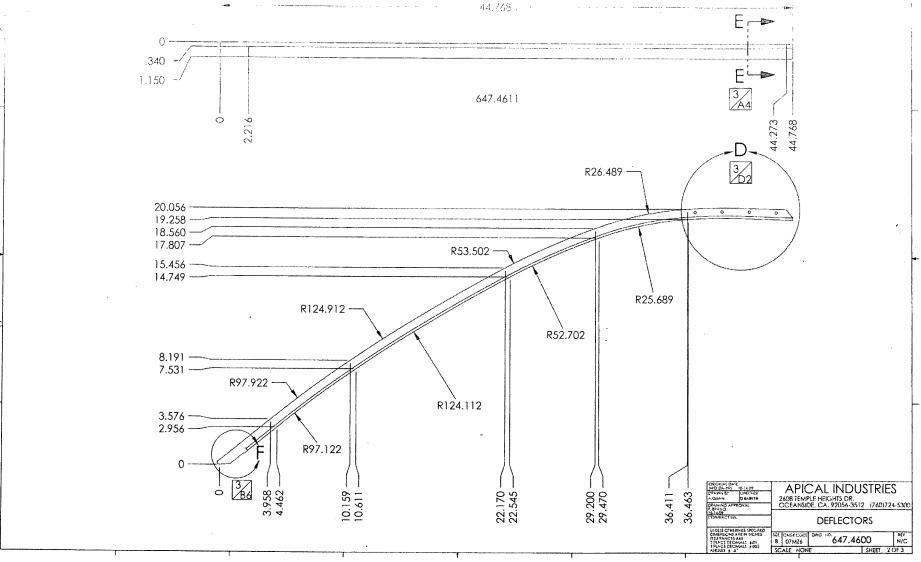
Folio



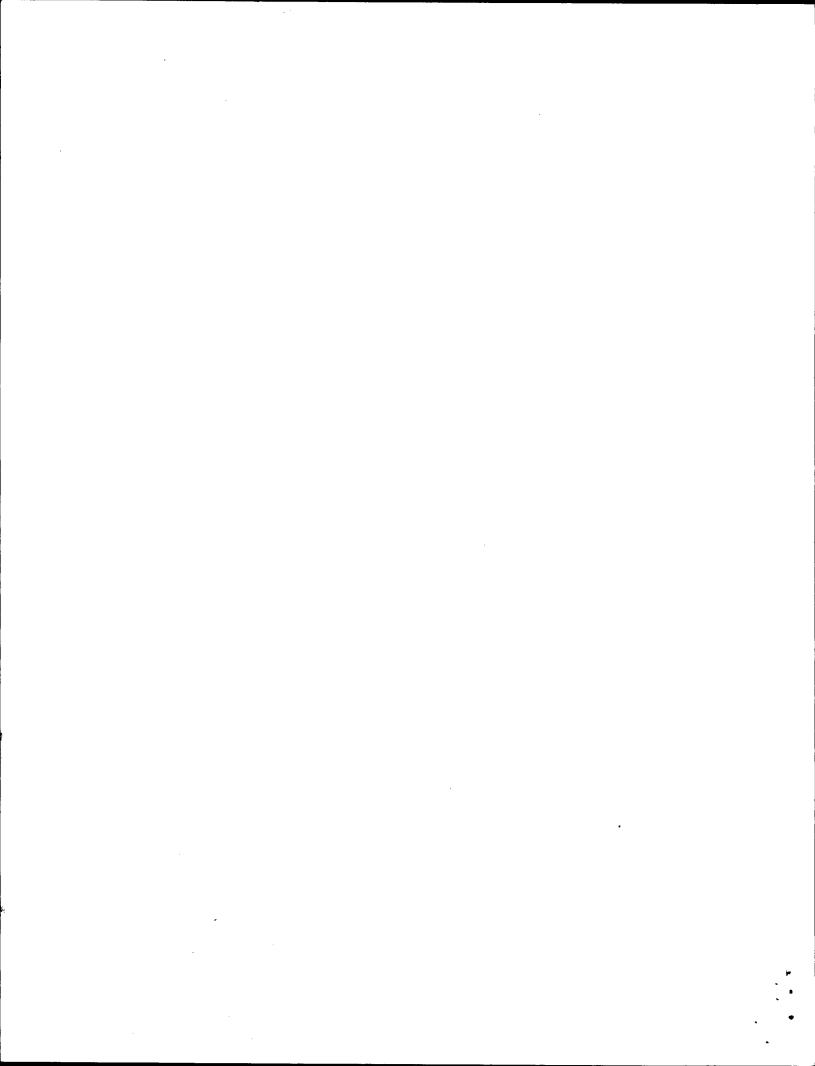
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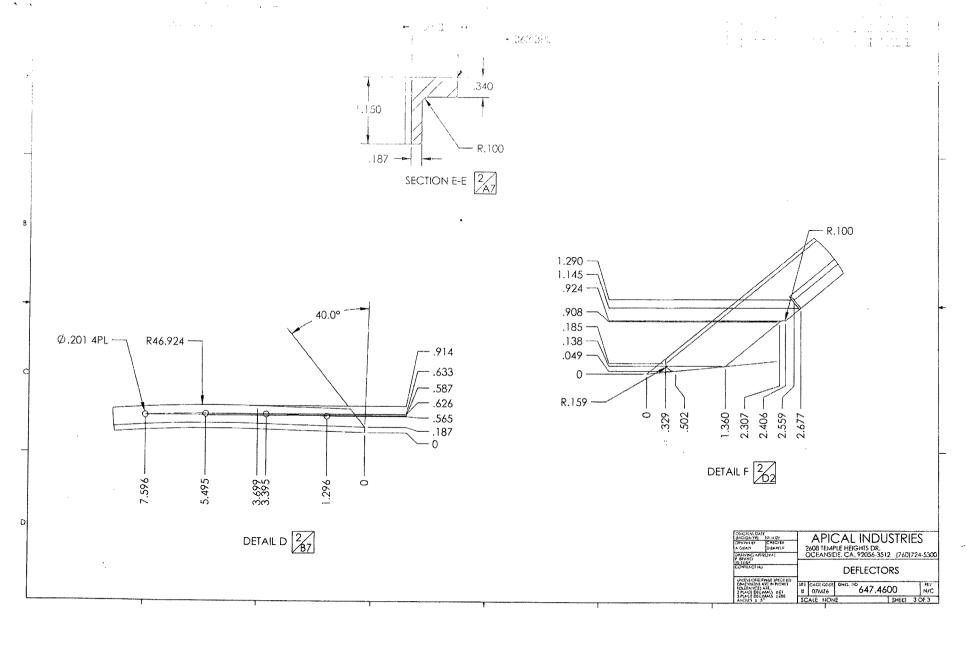


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DART AEROSPACE LTD	Work Order:	99919
Description: DEFLECTOR	Part Number:	647.4611
Inspection Dwg: 647,4600 Rev: N C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

THE TAKE THE POTTON CHECKES											
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments					
\$0.201	1.005/001	\$0.20!	1		Vein	6A-01					
40.0°	+/5°	40.0°	✓ <u> </u>		Angle Meter						
0.187	+ /005	0.188			Angle Meter	118-120					
1.150	+1005	1.150	~		Mic	6A-02					
0.800	+1005	897.0	~		Mic	OR-03					
0.346	+1005	0.339	~		11	11					
RO-063	+/005	RO.063	~		R-6	ref.					
R.100'	+1005	R0.100	>		()	11					
R.159	41005	RO.159	~		1)	11					
R = 100	+1005	RO.100	✓		11	11					
	<u>'</u>										
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	<u> </u>			L							

Measured by:	D .0	OAS	Audited by:	DAS	Preliminary Approval:	
Date:	13/05/14	8-89	Date:	5-89 13-5-22	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

₹. ****** -



A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62468

Date: 26-Jun-13

То

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	· · · · · · · · · · · · · · · · · · ·		
					
Quantity	Description				
5	Part: 647.4611		Rev:		
ea					
	HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2				
	PRIME MIL-P-23377J TYPE I CLA Job: 20130393	ASS N PO: 20070	Line:		
	Certificate of Co	onformance	,		
	ISO 9001 : 2008 RI ATG SALES-2010 T DATE : 26/6/13	EGISTERED TERMS APPLY			
	7				
	CERTIFIED SIGNATURE :				
	RECEIVER SIGNATURE :				
1		,			

		•

Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 Tel: 613 632 9577

OUTSTANDING PO REPRINT

Purchase Order ID PO20070

Purchase Order Date 6/3/2013 PO Print Date 6/26/2013

Page Number 1 of 1

Order From :

VC-ATG001

A.T.G. INDUSTRIES INC. 731 INDUSTRIELLE ROAD ROCKLAND, ON K4K 1T2 **CANADA**

Contact Name

Vendor Phone

613-446-4544

Vendor Fax

613-446-4556

Vendor Account Nbr

Buver

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr Reference **Revision ID** Vendor Part Number

Description/ Mfg ID

Req Date/ Taxable Req Qty

Unit Price

REVISED

Extended Price

Ship To:

DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Vendor Part Number

Line Nbr Reference

99919

Revision ID

Description/ Mfg ID

647.4611 DEFLECTOR

Req Date/ Taxable Unit of Measure

Yes

6/7/2013

Req. Qty/

5.00

Unit Price

Extended Price

Ship Method

\$46.2000 FedEx PI collect

\$231.00

\$231.00

Special Inst:

FINISH BLACK ANODIZE PER IAW

MIL-A-8625 TYPE III,

CLASS 2, COLOR BLACK

FINISH: PRIME AS PER IAW MIL-P-

23377J TYPE I CLASS N

Outstanding PO Total:

Line Total:

\$231.00

Pricing listed above is as per contract agreement between Dart Aerospace and the respective manufacturer. No substitution or deviation without

Change Nbr:

3

Change Date: 6/26/2013

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		•